NDDOT Stormwater Training and Special Provisions





Stormwater Training and Certification Program



NDDOT Stormwater Training and Certification Program

Two Course Types

- Design
- Construction

Training

Certification





Special Provisions

SP0003(14)

Temporary Erosion and Sediment Best Management Practices

SPxxxxxx

Temporary Stream Diversions



SP03(14)

Temporary Erosion and Sediment Best Management Practices

- All Projects Greater Than One Acre
- Defines Contractor Responsibility



SPxxxxxx Temporary Stream Diversions

General Requirements for things found in all diversion types

Specific Requirements for pieces of diversions that may be applicable

Contractor develops a plan based upon the situation and diversion type



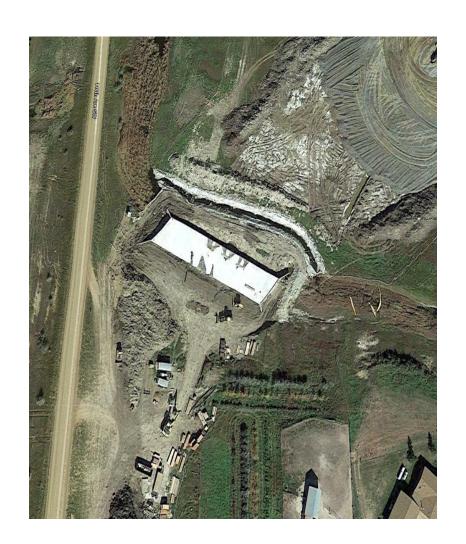
Temporary Stream Diversions

Upstream water quality = Downstream water quality

Maintain Normal Flow

Large Risk in
Extremely
Environmentally
Sensitive Areas





Temporary Stream Diversions

Stream Diversion = Stream

Minimize impacts

Negates other work if done wrong





Culvert Extensions as of January 20th, 2015

May change from this version

Also one similar created for new construction

Traffic Bypasses may be included in the future





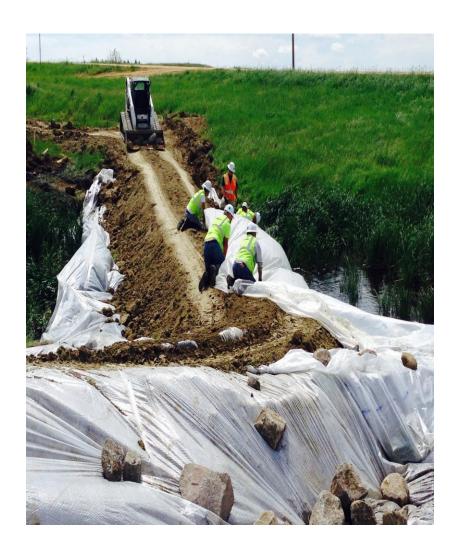
General Requirements

Construct using a dike and a combination of the items listed

Place stockpiles and excavated material ≥ 200 feet away

Work Area Dewatering requirements





Plan

Submit a Temporary Stream Diversion Plan with SWPPP.

Include provisions for:

Preventing sediment accumulation

Concrete waste control

Construction debris control





Types of Diversions

Pipe Diversion

Suspended Pipe Diversion

Pipe Diversion

Channel Diversion

Pump Diversion

Existing Cell or Culvert

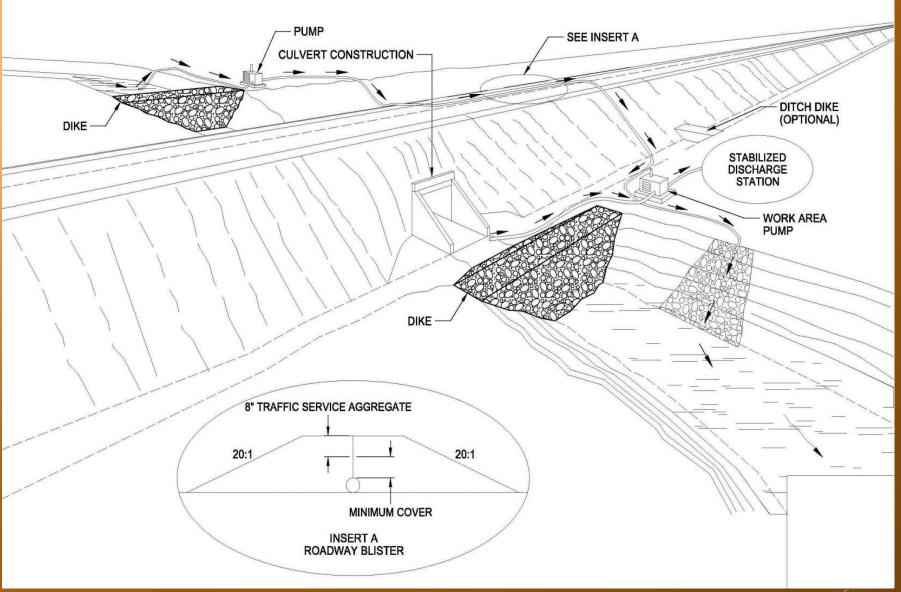


PIPE-BOX DIVERSION DITCH DIKE (OPTIONAL) CULVERT DITCH DIKE (OPTIONAL) STABILIZED DISCHARGE STATION DIKE

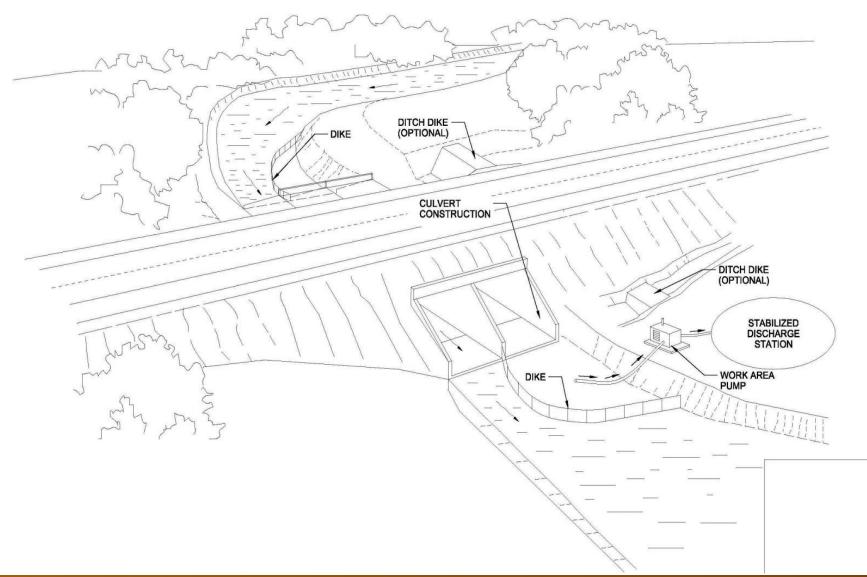
PIPE DIVERSION CULVERT CONSTRUCTION DIKE DITCH DIKE (OPTIONAL) STABILIZED DISCHARGE STATION **WORK AREA PUMP** DIKE TEMPORARY CULVERT RIPRAP AND/OR GEOSYNTHETIC TYPE R1 FABRIC -SILT FENCE OR FIBER ROLLS AROUND DRAINAGE AREA

CHANNEL DIVERSION CULVERT CONSTRUCTION DIKE DITCH DIKE (OPTIONAL) STABILIZED DISCHARGE STATION **WORK AREA PUMP** A SILT FENCE OR FIBER ROLLS RIPRAP OR GEOSYNTHETIC FABRIC SILT FENCE OR FIBER ROLLS RIPRAP OR SANDBAG LINER SILT FENCE GEOSYNTHETIC TYPE R1 FABRIC SILT FENCE SILT FENCE OR FIBER ROLLS OR FIBER ROLLS OR FIBER ROLLS GEOSYNTHETIC TYPE R1 FABRIC N. 37 OR WIDTH (VARIES) TYPE 1: FABRIC LINED **TYPE 2: RIPRAP LINED**

PUMP DIVERSION



BOX DIVERSION



Removal

Permanent ESCMs and flow dissipation before opening to flow

Flow dissipation

Remove individual pieces in correct order





Removal

Do not start removal until complete

Remove all materials used to construct diversion

Do not wait to remove diversion once work within the channel is complete

Includes placement of riprap and permanent ESCMS

Restore diversion area to preexisting condition

Basis of Payment

Pay Item = Temporary Stream Diversion

Pay Unit = Each

75% paid upon installation

Last 25% upon removal and restoration





Basis of Payment

Include cost of installation, maintenance and removal

Including traffic control and ESCMs

SP 03(14) does not apply to ESCMs for stream diversions





Questions?

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